

Science On a Sphere - 5.5 Release Notes



Version 5.5.2
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Table of Contents

Introduction	3
Release Dates	3
Requirements & Installation Instructions (Please Read!)	3
New Features in 5.5.0	3
Main SOS Program	3
Enhancements in 5.5.0	4
Main SOS Program	4
Visual Playlist Editor	4
Fixes in 5.5.1	4
Fixes in 5.5.2	4
Known Bugs in 5.5	4
Backward Compatibility Considerations	4
SOS Remote App ("SOS App")	5
Visual Playlist Editor ("VPLE")	5
NOAA Kiosk ("Kiosk")	5

Introduction

This document summarizes the changes and additions to the Science On a Sphere® (SOS) main software in the version 5.5.x releases. Be sure to make note of the Wibu CodeMeter dongle and Ubuntu 18.04 LTS operating system requirements in the "[Requirements & Installation Instructions](#)" section below.

For detailed information on SOS display features, please refer to the [SOS Display Software Manual](#) (or browse to: *Support > Manuals > Display Software* on the SOS website).

Release Dates

- Version 5.5.2 - November 18, 2019
- Version 5.5.1 - October 17, 2019
- Version 5.5.0 - October 11, 2019

Requirements & Installation Instructions (Please Read!)

- **SOS 5.5 requires your SOS computers to be running Ubuntu 18.04 LTS.** This is a change from all previous versions of SOS.
 - If you are running SOS 5.1 or later, you are using **Ubuntu 16.04 LTS** and your systems must be upgraded to **18.04 LTS** prior to installing SOS 5.5. A full install of 18.04 LTS is probably unnecessary.
 - However, if you are running SOS 5.0 or earlier, your systems have **Ubuntu 12.04 LTS**, which is no longer being maintained or updated. You will need to do a full install of **Ubuntu 18.04 LTS** before you install SOS 5.5.
 - We are happy to assist you in your SOS 5.5 installation (just email our support team at sos.support@noaa.gov). We will provide detailed instructions for you to follow or we will help you as needed.
- **We increased our software security measures starting in SOS version 5.3. SOS requires a licensed Wibu CodeMeter security USB dongle before you can do a software upgrade from version 5.2.x or before.** You can request one using an online [SOS Version 5.3.0+ Upgrade Request form](#). Once SOS Support has received your request, a dongle will be mailed to your site. If you run into any problems using the request form you can e-mail us at sos.support@noaa.gov. We will provide instructions on how to upgrade your system to 5.5 once we have mailed out your new CodeMeter device. Also, please note that the installation processes for the iOS Remote App and Public Kiosk have not changed for 5.5.

The 5.5 release includes new features, enhancements, and fixes in several applications across the SOS application suite. Each of the following have links to their own 5.5 Release Notes and updated documentation as indicated:

- [SOS Remote App Release Notes for 5.5](#) ("SOS App"). You may also wish to see the full [SOS Remote App Manual](#) (or browse to: *Support > Manuals > SOS Remote App* on the SOS website).
- [Visual Playlist Editor Release Notes for 5.5](#) ("VPLE"). You may also wish to see the full [Visual Playlist Editor Manual](#) (or browse to: *Support > Manuals > Visual Playlist Editor* on the SOS website).
- [Public Kiosk Release Notes for 5.5](#) ("Kiosk"). You may also wish to see the full [Public Kiosk Manual](#) (or browse to: *Support > Manuals > Public Kiosk* on the SOS website).

New Features in 5.5.0

Main SOS Program

- SOS now runs on the Ubuntu 18.04 LTS operating system. This includes 2 years worth of Linux feature additions and bug fixes since 16.04.

- SOS system configuration has been improved and now has a settings manager with a user interface to change system settings. While this is not used often it will greatly simplify changing settings without the need of error-prone hand editing.
- Projector On/Off controls are in the automation control protocol so they may be run by other programs. We've implemented this in the Remote App under Settings.

Enhancements in 5.5.0

Main SOS Program

- Changed the Text PIP code to scale off of pipheight instead of pipwidth. This greatly improves text scaling appearance so that using the same font size in different Text PIPs will have a similar appearance on the sphere. **IMPORTANT:** Because of this change, the Text PIPs you have already created using previous versions may look different in SOS v5.5. Please read the "**Steps to Take After You Upgrade**" section in the [Text PIP Updates for SOS v5.5](#) document.

Visual Playlist Editor

- When creating and previewing a dataset that has Text PIPs, the Preview window will now show the actual text instead of the "PIP Text" placeholder image!

Fixes in 5.5.1

- The 5.5.0 release had a build issue that needed correction.

Fixes in 5.5.2

- Fix for an issue with exhibit distance calculations.
- Fix for bad combobox behavior while scrolling in the config manager.
- Fix for a file ownership issue in the 5.5.0 release.

Known Bugs in 5.5

The following issues identified in SOS were not changed in this release, but will be fixed in the future.

- Hidden layers briefly flash on the sphere when dynamically added to another dataset using the iOS Remote App.
- Icons added to a playlist cannot use absolute paths.
- The iPad may continually prompt to update the database after the upgrade. This issue should go away after 24 hours or if you manually update the local data catalog. You can do that by opening the SOS program and then selecting Library -> Update Library or by manually running the `/shared/sos/bin/sitecustom2db` program from a terminal.

Backward Compatibility Considerations

For best results, we strongly encourage you to update all your SOS software applications at the same time to version 5.5, including the Visual Playlist Editor, SOS Remote App, and Public Kiosk. To assist you in planning your SOS software upgrades, you can visit the [SOS Product Suite page](#) on the [SOS website](#).

Where possible, individual SOS 5.5 software components have been updated so that they will continue working with SOS versions as far back as 4.3, recognizing there may be some limitations. Components older than 4.3 are incompatible with version 5.5, so you will need to do a full update of all the SOS software applications to version 5.5.

SOS Remote App ("SOS App")

- SOS App 5.5 should work with SOS 5.0 and later.
- SOS App 5.5 may work with SOS 4.3, but has not been tested.
 - There are some incompatibilities in the SOS Data Catalog, for example. Dataset variations (such as Blue Marble with audio) will not show up in the Data Catalog on the iPad. However, they can still be displayed on the sphere if they are already in presentation playlists.
 - The Splitter tool, Text PIPs, and individual PIP controls are not supported.
- SOS App 5.0 through 5.4 should work with SOS 5.5, but has not been tested.
- SOS App 4.3 may work with SOS 5.5, but is inadvisable and has not been tested. The following limitations were documented previously when testing SOS App 4.3.1 with SOS 5.0.0:
 - Transferring the Data Catalog from the SOS machine to the iPad may timeout and fail to complete. This would prevent any new updates to the Data Catalog from being loaded onto the iPad.
 - The iPad would still display datasets that are in presentation playlists on the sphere.

Visual Playlist Editor ("VPLE")

- VPLE 5.5 presentation and dataset output should run fine in SOS 5.1 and earlier, but has not been tested. Text PIPs and moving PIPs may be created in VPLE 5.5 but cannot be displayed using SOS 5.1 or earlier versions.
- VPLE 5.0 and later will be replaced automatically when installing SOS 5.5, so backward compatibility will not be an issue.

NOAA Kiosk ("Kiosk")

- Kiosk 5.5 should work with SOS 4.3 and later.
 - Note that you cannot customize datasets and groups in the Kiosk using the `media2kiosk` in SOS 5.0 or 4.3. However, the default kiosk configuration should work okay.
- Kiosk 5.0 through 5.3 may work with SOS 5.5, but have not been tested.